

Claims

[c1] What is claimed is:

1.A method for forming a disk of a disk drive, the disk drive having a slider for reading data from or writing data to the disk, the method comprising:
providing a disksubstrate; and
performing a laser process using a pulse laser with a pulse width of 20~90ns and an energy of 0.5~6.0 μ J for forming a plurality of rimless depressions in an inner diameter zone having a radius between 0.65" and 0.78" of the disk substrate, so that a landing zone is formed for landing the slider.

[c2] 2.The method of claim 1 wherein the pulse laser comprises an Nd-YVO₄ solid state laser having a wavelength of 1064 nm.

[c3] 3.The method of claim 1 wherein the depressions are formed to reduce a contact area between the slider and the landing zone and decrease friction/stiction between the slider and the landing zone.

[c4] 4.The method of claim 1 wherein the disksubstratecomprises a substrate and aplating layerdeposited on the

substrate.

- [c5] 5.The method of claim 4 wherein the depressions are formed in the plating layer.
- [c6] 6.The method of claim 4 further comprising:
 - forming a magnetic layer on the plating layer for recording the data;
 - forming an overcoat layer on the magnetic layer for protecting the magnetic layer; and
 - coating a lubricant layer over the overcoat layer for reducing friction/stiction of a surface of the disk.
- [c7] 7.The method of claim 6 wherein a depth of each of the depressions is between 10Å and 20Å for effectively supplying surfaces of the landing zone with the lubricant from the depressions.
- [c8] 8.The method of claim 6 wherein the substrate comprises an aluminum material.
- [c9] 9.The method of claim 6 wherein the plating layer comprises nickel-phosphorus(NiP).
- [c10] 10.The method of claim 6 wherein the magnetic layer comprises cobalt(Co), a cobalt alloy, chromium (Cr), or a chromium alloy.
- [c11] 11.The method of claim 6 wherein the overcoat layer

comprises carbon or hydrogenated carbon.

- [c12] 12. The method of claim 1 wherein the depressions are formed having an approximately uniform size and depth.